



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,051	02/15/2002	Felipe Knop	POU920020018US1	1593

7590

08/25/2005

LAWRENCE D. CUTTER, Attorney
IBM Corporation
Intellectual Property Law Dept.
2455 South Rd., M/S P386
Poughkeepsie, NY 12601

EXAMINER

GILLIS, BRIAN J

ART UNIT

PAPER NUMBER

2141

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,051

Applicant(s)

KNOP ET AL.

Examiner

Brian J. Gillis

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002 and 02 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori (US PGPUB #US2002/0062217) in view of Vepa et al (US Patent #6,694,369).

Claims 1, 5, and 8 disclose a method, system, and a program product for detecting node reachability inconsistencies in the presence of temporary communication failure or temporary daemon blockage, said method comprising: upon detecting at a first node conditions suitable for instituting change in adapter group membership, sending to a recipient node, a message indicative of membership in a previous stable adapter membership group upon the condition that said recipient node is also indicated as being part of said stable group; and initiating a group join protocol in which said message is rejected by a recipient node under a condition selected from the group of conditions consisting of (1) said message includes indicia showing that the sending node and the recipient node are in the same adapter membership class, said indicia being in conflict with corresponding indicia stored within said recipient node; and (2) said message includes indicia showing that the sending node and the recipient node are in different adapter membership classes, said indicia being in conflict with corresponding indicia stored within said recipient node. Fujimori teaches of detecting an additional node to

Art Unit: 2141

connect to the communication network and initiating a join protocol (paragraph 16, lines 15-22, paragraph 44, lines 3-8, figures 3, 4B, 5, 6). It fails to teach of initiating the join protocol under a condition selected from a group of conditions. Vepa et al teaches of a comparison where a transmission is received and is processed based on a comparison (column 7, lines 46-54).

Fujimori and Vepa et al are analogous art because they are both related to network interconnection.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the comparison in Vepa et al with the node detection in Fujimori because efficient communication on a network where compliant and non compliant computers may be connected at various ports is provided (Vepa et al, column 3, lines 27-31).

Claim 2 discloses the method of claim 1 in which said conditions include failure to detect heartbeat messages at said first node. Fujimori teaches of detecting an additional node to connect to the communication network and initiating a join protocol (paragraph 44, lines 3-8, figures 3, 4B, 5, 6). It fails to teach of using the detection of heartbeat messages. Vepa et al teaches of a comparison where a transmission is received and is processed based on a comparison and of using the detection of a heartbeat message (column 7, lines 46-54, column 8, lines 3-15).

Fujimori and Vepa et al are analogous art because they are both related to network interconnection.

Art Unit: 2141

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the comparison and heartbeat message detection in Vepa et al with the node detection in Fujimori because efficient communication on a network where compliant and non compliant computers may be connected at various ports is provided (Vepa et al, column 3, lines 27-31).

Claims 3, 6, and 9 disclose the method, system and program of claims 2, 5, and 8 further including a step in which said first node, after its first message is rejected, transmits a second message which is indicative of nonmembership in a previously stable group, whereby the goal of having the sender and receiver agree on adapter group membership is advanced. Fujimori teaches of detecting an additional node to connect to the communication network and initiating a join protocol (paragraph 44, lines 3-8, figures 3, 4B, 5, 6). It fails to teach of transmitting a second message in order to have the sender and receiver agree on membership. Vepa et al teaches of retransmitting a message to make certain the client is receiving but ignoring the ping request (column 8, lines 15-18).

Fujimori and Vepa et al are analogous art because they are both related to network interconnection.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the message retransmittal in Vepa et al with the node detection in Fujimori because the system is able to reconfigure itself in real time avoiding failed communications (Vepa et al, column 3, lines 40-45).

Art Unit: 2141

Claims 4, 7, and 10 disclose the method, system, and program of claims 3, 6 and 9 further including the step of processing said second message so as to provide mutually consistent views of the liveness of nodes in the membership group. Fujimori teaches of detecting an additional node to connect to the communication network and initiating a join protocol (paragraph 44, lines 3-8, figures 3, 4B, 5, 6). It fails to teach of processing the second message to show the liveness of nodes. Vepa et al teaches of establishing client status at regular intervals (column 10, lines 60-67).

Fujimori and Vepa et al are analogous art because they are both related to network interconnection.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the establishing of client status in Vepa et al with the node detection system in Fujimori because a frequent status update is provided without burdening the network with unnecessary inquiries (Vepa et al, column 11, lines 13-16).

Response to Arguments

Applicant's arguments filed August 2, 2005 have been fully considered but they are not persuasive.

Applicant asserts there is no reference to a previous state. Examiner respectfully disagrees, Vepa et al teaches a client is compliant if the client can read the identifier tag sent in a packet. The client must have met an already set precondition in order to be able to enter a compliant state (column 3, lines 50-65). Fujimori teaches of a similar process where an authorized node is able to decode the encrypted code, in order to do

Art Unit: 2141

so the node must have already met an already set precondition in order to be authorized (paragraph 16, lines 15-22).

Applicant asserts there is no reference to a joining operation or a join protocol. Examiner respectfully disagrees, Vepa et al teaches once the client is compliant it is updated in memory joining the list of compliant clients (column 9, lines 22-35). It is widely known in the art once a client is to move from one group to another a join method is initialized in order for the move to take effect.

In response to applicant's arguments, the recitation "a method for detecting node reachability inconsistencies in the presence of temporary communication failure" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2141

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gillis whose telephone number is 571-272-7952. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian J Gillis
Examiner
Art Unit 2141

BJG


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER